Online Teaching-Learning in Higher Education during Lockdown Period of COVID-19 Pandemic in India

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Abstract   In India, educational institutions (schools, colleges and universities) are presently focused primarily on formal learning strategies, that is, adopting the traditional framework of face-to - face traditional classrooms. To determine the effect of the COVID-19 lockdown on bachelor's degree learners with different Indian colleges and universities. During that same pandemic, students from rural regions and marginalized areas primarily face immense technical challenges. Therefore, the analysis of these phenomena in the population of India is significant. This paper illustrates the effects of the middle flu outbreak on the Indian education sector and also points to some fruitful recommendations for carrying out educational activities during the pandemic situation. In addition, the role of teachers and the access to infrastructure for online education are identified. Qualitative methodology is a technique used for this study. This research involved the study of foreign and national publications, correspondence with the library, professional opinion, journal articles, newsletters, and records.

Keywords: COVID-19, Education, Govt. Of India, Online Teaching-Learning, Teaching, Technology.

1. Introduction

With 1.35 billion people (Census Report of India, 2011 and Pew Research Center, 2018), due to India's largest democratic nation after China by the universal right to an education for the Indian people (Wikipedia.org). The Right to Education Act adopted as education is the basic right of any child in India (RTE Act, 2009 and Premlakshmi, 2011) In the Constitution of India, the 86th Amendment Act 2009 was introduced in 2002, and Article 21-A was introduced provide the compulsory primary education for all children aged six to fourteen years. India has

been able to recognize the long-standing concern between quality and equality by the implementation of new technologies in the education sector (Singh, 2015). The planet was rattled by the unexpected outbreak of a lethal illness called Covid-19 spread by the Corona Virus (SARS-CoV-2). It was stated to be a pandemic by the World Health Organization. This condition threatened worldwide educational systems and compelled educators to move rapidly to an online style of teaching. In response to these complexities and obstacles, attempts to accelerate holistic arithmetic methods may have been thwarted. Other sciences such as history, geography, fine arts, and physical education are linked to statistical knowledge (Das et al., 2019e). There was no alternative but to move completely to online teaching-learning for so many public institutions who were historically hesitant to change their conventional pedagogical approach.

The virus COVID-19 has spread across the world, including India. This pandemic of the coronavirus has drastically affected all markets, along with the education market, impacting people's socio-economic conditions and the educational systems. The lockdown to break the dissemination link of the disease in the nation was announced by the government of India and states and the schools, colleges, universities, and other forms of educational institutions were forced to shut down as a precaution to curb the dissemination of the novel coronavirus. That several universities and colleges were forced to stay temporarily closed by the Covid-19 pandemic outbreak. Globally, many places are affected and there is a fear of missing this entire current semester or so much more in the near years. Through-person instruction has been discontinued by numerous schools, colleges, and universities. According to the researchers' evaluation, it is unclear if it will quickly be possible to return to normal teaching. This would have negative implications on opportunities to learn, as the social distance is preeminent at this point. Educational units are trying to find alternatives to cope with this tough situation. These conditions make us aware that an important need for higher education institutions is scenario planning (Rieley, 2020).

In the current sense of COVID-19, the role of teachers is highly relevant since it is the teacher who serves as a teaching facilitator of young minds and directs them across online education. Educators are being seen as a society in general cream, the reason is that they help kids become productive people. Widely acknowledged to be the nation's builders, through online education, they should provide the model in which the structure of the nation is shaped. By establishing substantive human relationships through the online education platform, teachers are required to be knowledgeable in their subjects and pace-setters of norms. They are supposed to have teaching ability and to be able to recognize a child's different faces.

If they continually learn, teachers will never actually instruct. In the sense of COVID-19, today, teachers have a great responsibility to inspire the children and youth of India. Das (2019a) examines several factors to assess the degree of job satisfaction of teacher-training colleges based on a multi-dimensional approach, such as working circumstances, pay status, and the willingness of colleagues to comprehend, etc. Equal and rational instruction, however, depends not only on their jobs but can differ with other variables. Employee happiness is also not substantially impacted by compensation, change, and cooperation with colleagues (Roy & Das, 2020). Legal and cultural principles, knowledge of the importance of our culture and history in thinking and community, our spirit in universalism and solidarity, the cultural indoctrination of scientific temperament, patriotism, and a sense of purpose in the challenge of advancing our great country all need to be nurtured by our educators by online education in younger generations. Education improvements, whether measurable or qualitative, can only be accomplished by the contributions of educators who are immediate stakeholders of the educational environment. Particularly in the sense of COVID-19, we want dynamic students, flexible officers, and a dynamic system to stimulate the stagnant and inefficient system. In comparison, it is still important to clarify and appreciate the essence of all teachers in the Department of Teacher Education (Das et al., 2019f). Widespread modern technologies have made it so easy for e-learning (McBrien et al., 2009). Online learning is described as an "educational experience using different devices (e.g. mobile phones, laptops, etc.) with internet access in wired or wireless environments." In these contexts, students learn and communicate with teachers and other students everywhere (independently) (Singh & Thurman, 2019).

2. Main Result:

2.1 Significance in during coronavirus outbreak of online education:

The abrupt lockdown may be a testing moment for students, but what it provides is the moment because of the numerous tests being delayed. If they use it to their benefit by striving on their target with the real changes, solitude can be a blessing for all students. In these testing times, online learning is a saviour and students can make the best of their time by opting to learn from the much more skilled teachers at the lowest costs.

Some perennial problems still haunt eLearning, despite having said that. First and highest in the country's digital divide and many attempts on the government's end also need to be made to close this gap and while unavoidable teething difficulties have arisen, we absolutely cannot argue that the future is defined by online classes. The latest epidemic has rendered many experts worried about the potential course of things and the only thing right now that can stop our lives from coming to a full standstill is online learning.

Linked to the improvised closing, the greatest financial backers and the blessing in camouflage are the online education sites in these applications. This online learning process, also known as e-learning systems, will fulfil the growing requirements of students in the most successful way. Online learning sites have seen an increase in the number of students enrolled in the various courses they offer. There seems to be a never-ending list that is open to you at the most reasonable price, through courses on different government sector examinations, academic courses to hobbies such as painting and even dancing. In general, the planning for government employment has thrown many students into a dilemma as they still want a conventional brick and mortar kind of environment even in these modern days. Progress, such as the use of emerging media in mathematics education, as a reaction to problems in the research field of mathematics education. An important part of everyday life, including the teaching-learning process and the use of ICT tools in mathematics education, classroom instruction, and interaction development (ICT) (Das, 2019d). The justification for that is the actual appearance of the instructors and the academic experience in such offline classes of pupils with common interests. This requires a comprehensive and dynamic preparation for the instructor. In their schools, mathematics behavioural illness creates the day-to-day practices and teaching strategies of mathematics teachers for students (Das & Gupta, 2020). Even so, recent developments in technology have taken the education sector by surprise.

In modern years, online education has crossed a lot of territories and the platform is more easily accessible, and on top of that, by remaining in the corners of their quarters, a student takes a teaching environment. There seem to be serviced to connect with the teachers and the others on the same course. Its variable rate of change is the main trump card. Students may improve their situation not during most of the class's stressful hours, but also during the moment they research themselves by email address or an online chat system. Thanks to its powerful processor, the examinations are often performed online today and thanks to the assessments built in

the electronic platform, online education makes students adapted to a somewhat exact exam setting and hence improves their reaction time and the likelihood of success. The happiness of the student is still prioritized with the inclusion of different courses by an infinite range of instructors with workshops and exchange policy. To exist on this ridiculously large network that improves the user - friendly interface and assists in their overall growth, an online learning trainer continues to improvise and contribute to their ability to deliver quality education with their peers.

2.2 Role of teachers:

The role of teachers is highly significant in the present context of COVID-19 because it is the teacher who acts as a Learning Facilitator of the young minds and guides them through online education. Teachers have been considered the cream of society, the reason is that they help children to become good citizens. Known to be the architects of the nation, they provide the mold in which the nation's character is cast through online education. The multidisciplinary Methods in Mathematics Education discusses the responsibility of mathematics teachers and explains the challenges and problems in integrating mathematics and methodological details and reduces the problems and concerns in mathematics and the combination in teaching and learning knowledge (Das, 2019c). Teachers are expected to be competent in their subjects and pace-setters of standards by developing a meaningful human relationship through the online education portal. They are expected to have an aptitude for teaching and must be capable of understanding several faces of a child.

2.3 Lockdown affects Education Sector of India:

In recent days, the Ministry of Human Resource Development (HRD) and numerous regulatory bodies, such as CBSE, NCERT, etc., have finally seen a flurry of activities to identify ways to ensure the continuity of education. Though now may not be a reasonable time to discuss India's particularly low education spending, it is possible to gauge the lack of seriousness against the industry from the assumption that HRD was held for spending in Category C (the lowest category), i.e. the said department would have to limit government spending to within 15 percent of that budgeted for Q1, 2020-21.

2.4 The successful role of teachers in the classroom:

The role of the teachers is incredibly meaningful in the current context of COVID-19 because it is the instructor who acts as a teaching decision-maker for emotionally fragile students and guides them through online teaching. Teachers gain their accessibility in their pre-service training periods. (Das &

Chowdhury, 2019g). Teachers have been used as the butter of our culture, which is why they help children become active citizens. Known to be the constructors of the country, they can provide a paradigm in which the nation's position is cast through online education. Teachers are expected to be competent in their subjects and pace-setters of norms by creating meaningful social interactions across the online education portal. They are expected to have knowledge of the subject matter and to be able to recognize the multiple faces of an infant.

Departments and policymakers have begun to establish online technology of academic achievement in this sense, as, ideally, a stop-gap framework. To 4 weeks of home-based events for distinct topics, NCERT has published an Alternate Academic Calendar. For illustration, for Class I-IV students, exercises such as categorizing items such as erasers, pencils, fabric, pulses, etc. to demonstrate the principles of colours, shapes, and sizes have been mentioned. Teaching conception is more progressive at the use of technology (Das, 2020). Even then, the realistic issues of execution, as well as the numerous socio-economic factors that characterize the Indian education climate, have hardly been addressed in this entire debate of shifting education online.

2.5 Advantages of Online Learning:

Digital learning is no modern trend, however as researchers say, it has become much more popular. There are several explanations for any of that, the key things including sustainability and versatility. E - Learning gives you the opportunity, at any time and context, to learn at your own pace. But like the price, there are many online education sites that offer thousands of courses at no discount, such as Skillshare and Udemy. They might also take YouTube lessons, of course, but I choose eLearning sites because they offer high-quality courses, and as well as there are no commercials and obstacles. Online learning sites often include a sense of togetherness, designing class projects and participating in group conversations, which is extremely important right now. The multidisciplinary Methods in Mathematics Education discusses the responsibility of mathematics teachers and explains the challenges and problems in integrating mathematics and methodological details and reduces the problems and concerns in mathematics and the combination in teaching and learning knowledge (Das, 2019c). The number of outlets for learning is daunting, and if you choose one, stick to it. I choose strategies that have subscription plans that are flexible, meaning I can take as many courses as I want. I just like shorter lessons more, because we may not have much resources to commit to studying right now, amongst my family and career.

Ability to a device, the Internet, and the encouragement to excel in a non-traditional classroom are the basic conditions for learners to enrol in an online course. Online courses offer an

exemplary means of delivery of courses self - evaluation by time or place that enables training to be available from everywhere all the time. Learners find the online world a comfortable way to suit their busy lives with school. A huge opportunity for many of students is the freedom to access a course from any device with internet connectivity, 24 hours a day, 7 days per week.

2.6 Gender-based disparity:

The gender disparity in online use is also dramatic. As recorded by the internet services Association of India in 2019, while 67 percent of men had internet service, the number for women was just 33 percent. In rural India, where the figures are 72 percent and 28 percent among men and women, respectively, the difference seems to be more prevalent. The predominant inequality in the virtual environment might transform into expanding educational disparities among learners if policymakers promote online courses without the required support steps.

Educational technology, apart from entry, also includes daily and predictable broadband internet. Telecommunication companies and broadband internet providers such as Vodafone, Jio and BSNL are providing services such as affecting quality and free internet to their customers to enable remote work from home during the same lockdown time. A research by Quacquarelli Symonds on network use in India shows that not all users have yet attained guaranteed communication between the state and private players. The study suggests that over 3 percent face cable cuts, 53 percent face weak communication and 32 percent face signal problems among respondents who use home broadband. 40.2 per cent face low communication and 56.6 per cent face connectivity difficulties in the case of cell data. The loss of connection is sometimes not a technological glitch. For eg, students also couldn't access online classes in Jammu and Kashmir because a government order limited network coverage to 2 G instead of 4G. A whole collection of external gaps are visible, even though the infrastructure development are in operation.

2.7 Digital Infrastructure:

Facing efforts by central and state governments, spending on developing the digital infrastructure for remote learning is still not adequate. The Ministry of Human Resources Growth allocation for electronic e-learning was currently shortened to Rs 469 crore in 2020-21. In 2019-'20 from Rs. 604 crore. The global epidemic of Covid-19 has shown how cultural deficiencies are entrenched across rural and urban, men and women alike, urban and rural, also in the digital world. Expanding online education would drive the digital poor to the periphery of the education sector with the new digital gap, thus increasing inequality in this country of educational

performance. Infrastructure facility is one of the keys that indicates the progress of education (Das and Roy, 2019). Extremely efficient mathematical laboratory for teaching educational experiences and the relationship between mathematics concepts and real-life everyday life (Das, 2019b).

2.8 Availability of restricted internet:

The National Sample Survey Office (NSSO) 75th study for 2017-18 identifies so many of the big challenges that will have to be solved by this new paradigm. The majority of houses with internet access in all of India is 23.8 % with 14.9 time's higher rural accessibility and 42 percent urban access.

The question does not stop there, since providing a service does not guarantee that it will be used. The number of people who could connect to the internet (all-India) was 20.1 percent, with 13 percent rural and 37.1 percent urban. Additionally, in the last 30 days, only 10.8% of people in India have used the internet. It is important to keep in mind that these numbers vary greatly between various states around the nation. For example, for people who are using the internet in 30 days, Bihar is the lowest (9.1 percent), while Delhi has the largest number (49.1 percent) of people with larger states such as Maharashtra (26 percent), Rajasthan (15.3 percent), Andhra Pradesh (14.8 percent), etc. in the centre. The above numbers are based on the central justification to use the technology as a platform of providing education, and show how the bulk of the world will be left out of the search for education system in the months at least.

2.9 During the Context of Isolation Teaching:

I submitted an email input from students about my first experience of capturing a remote lecture. Previously, we had performed a few podcasts, but both were quite often interviews, i.e. in the rehearsal space, we were listening to someone who was answering questions and responding to my remarks. But with my devices alone, looking at the walls, despite three decades of teaching, I felt like a beginner, with the same nervous intensity I had felt during my very first lesson. The relief I felt was overwhelming as students began answering with constructive reviews.

After all, after a week of playing with filmed lectures, I realized that the connection between learners and the instructor as well as between students themselves is a distinguishing characteristic of the classroom. Students feed on the energy, good and negative, of each other. Students are indeed very cunning: it keeps teachers on their toes to predict their questions and plan for hypotheticals that may be posed. I moved to online lectures from week 2 onwards, where I can see my students on the computer as I give my lesson. It's not the

same as to get together in university, but the memory can be recreated as near as one can come.

2.10 As teachers work from home:

The global epidemic has allowed forcing all of us fortunate enough though to work away from home (WFH) to have daily jobs. Middle-class freelancers have already done this, but teaching is or has been, inherently about human interaction, about teachers' and students' real-time communication. When you turn to WFH for what seems like an immediate future, you start thinking. May this be the future of pedagogy? Is Zoom or Google Meet permanently replacing the classroom? Looking farther forward, are universities just going to require people or robotics to record and post lectures on the internet? Is the human teacher a skeleton in a real school, on the edge of extinction?

Digital format downloadable lessons are not recent anything and have been developing steadily over the last decade, and more to very specialized forms. The site is a treasure chest of stunningly well-curated material and instructional resources. Only a Luddite will dispute the positive transformative role played by many virtual channels in disseminating information by launching ivory tower principles, instruments, scholarship, and insights and making them available and functional to those who have access to the internet and understand where and when to look.

3.   Suggestions for e-Learning Courses:

✓ Access throughout seeing what courses you'd have to take until you have selected a forum you have. Be practical, you're not going to be able to take 50 lessons per month. Stick with the ones you would love much more.

✓ Create a schedule and send updates to the calendar so that courses will not be missed. Know, at any moment, you can take lessons.

✓ The secret to good learning is constructive engagement. So build your classroom assignments, execute the activities, get input from your classmates, communicate with other students, ask questions, and join in discussions.

✓ Bring new knowledge to real-life scenarios that you've mastered.

✓ Get some fun. Enjoy this method. To do it your way at all times.

✓ Even if you're not loving the course for any reason, leave and take something else. Even if you just make it challenging to focus or you feel like you're tired, try to prep for at minimum a few minutes a day, and after a couple of days, you'll see how you feeling about both the course.

4.   Conclusion:

Most qualified teachers and care professionals are aware of the outbreak during this coronavirus pandemic, potential prevention steps, the significance of separate channels, and government actions that have been taken to limit the spread of disease. The study concluded that education plays a major role in the socio-economic development of individuals in every country. There are some deficiencies in the system of education, and now a day-old world faces a modern novel-corona virus pandemic problem. E-learning can continue to deliver blended learning and disaster scenarios. In educational institutions, such programs need to be established to ensure that no pupil newspaper of Educational communication technologies is deprived of education due to their region, social status, race, and so on.

Online education approaches help and promotes teaching practices, but there is a dire need to weigh the benefits and disadvantages of technology and harness its ability. Disasters and pandemics such as Covid-19 will cause a lot of uncertainty and uncertainties, so in the middle of such emergencies, there is an impactful need to research the technologies thoroughly although with reasonable caution to handle these concerns and hostilities. Declaration of

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